

Art Unit: 2439

### **DETAILED ACTION**

1. This action is in reply to applicant's correspondence of 24 February 2010.
2. Claims 1, 3-11 and 13-20 are pending for examination.
3. Claims 1, 3-11 and 13-20 remain rejected.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 February 2010 has been entered.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 11 (and claims 13-20 by dependency) are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter

Claim 11 as recited appears to be directed towards a signal (i.e. "A computer readable medium storing instructions that enables a graphics controller to: ...". Signals, despite being tangible, do not fall within any of the four statutory category of invention, thus claim 11 (and claims 13-20 by dependency) are not statutory. Note that "computer readable medium" was interpreted to encompass signals because the application as originally filed does set forth the metes and bounds

Art Unit: 2439

of what is meant to be encompassed by the phrase, however the inclusion of the phrase “The set up software 50 *may be* stored in the option memory 20, ...” in the specification (page 4, line 21-26), directs the disclosed embodiments to be interpreted as signals per se. Any claim not specifically addressed above is being rejected as incorporating the deficiencies of a claim upon which it depends.

The examiner suggests for the sake of moving prosecution forward that the claim 11 (and claims 13-20 by dependency) specification embodiment phrase (page 4, line 21-26) “The set up software 50 may be stored in the option memory 20, ...” be corrected: (1) to recite “The set up software 50 may be stored in the option *non-transitory* memory 20, ...” , and (2) that the applicant direct the amendment of appropriate claims dealing with “A machine-readable medium containing executable instructions that, when executed by a machine, cause the machine to perform operations, comprising ...”, to read as “A computer readable *non-transitory* medium storing instructions that enables a graphics controller to: ...”, insofar as differentiating the inventive concept from non-statutory embodiments, and possible related art.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clough et al, U.S. Patent No. 5,379,057 and further in view of Ultimaco Safeware AG, 'SafeGuard

Art Unit: 2439

Easy', Ultimaco Safeware AG, 08/2000, entire document,

<http://web.archive.org/web/20000301132302/www.ultimaco.de/english/index1.htm> ('Ultimaco').

Clough et al *generally* teaches and suggests (i.e., Abstract, figures 1-14 and associated descriptions in general) the limitations set forth in the claims below – the system with associated graphic controller and authentication functionality, etc., as modified further as described below.

It is noted that Clough et al, does not disclose the specific use of a pre-boot authentication/security application per se as an installable application to perform the fundamental computer access control functions insofar as security/system use authorization for multiple users is concerned. However, the examiner asserts that it would have been obvious to one ordinary skill in the art at the time the invention was made for a portable computer system of Clough et al to require controlled access by users, especially in the case of a portable (i.e., legitimately or illegitimately removable for access thereof), via the installation of the Ultimaco 'SafeGuard Easy' pre operating system access control application.

Such motivation to combine would be obvious in light of the Ultimaco inventive concept is clearly directed to at least a standard system/PC product environment (i.e., MS Windows <sup>TM</sup>), where standard system/PC products that are portable and used by multiple users/applications would clearly required controlled access to the system resources (i.e., the Ultimaco 'SafeGuard Easy' encrypts/secures the hard drive for subsequent decryption/access during the operating system boot process).

A recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art if prior art has the capability to do so (See MPEP 2114 and Ex Parte Masham, 2 USPQ2d 1647 (1987)).

Art Unit: 2439

***Prior Art's Broad Disclosure vs. Preferred Embodiments***

As concerning the scope of applicability of cited references used in any art rejections below, as per MPEP § 2123, subsection R.5. Rejection Over Prior Art's Broad Disclosure Instead of Preferred Embodiments:

I. PATENTS ARE RELEVANT AS PRIOR ART FOR ALL THEY CONTAIN "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also > Upsher-Smith Labs. v. Pamlab, LLC, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005) (reference disclosing optional inclusion of a particular component teaches compositions that both do and do not contain that component); < Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) (The court held that the prior art anticipated the claims even though it taught away from the claimed invention.). > See also MPEP § 2131.05 and § 2145, subsection X.D., which discuss prior art that teaches away from the claimed invention in the context of anticipation and obviousness, respectively.<

II. NONPREFERRED AND ALTERNATIVE EMBODIMENTS CONSTITUTE PRIOR ART  
Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

6. As per claim 1; "A method comprising:

receiving a password through

a graphical user interface

generated by a graphics controller before an operating system boots

*[figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas*

*the portable integrated computer system with associated touch screen, software*

*configurable keyboard, optional memory configurations, installable applications*

*(e.g., downloadable or external memory transferable) etc., comprising a*

*microprocessor based controller and associated integrated peripheral*

*logic/circuitry (e.g., video graphic components/circuitry (' ... a graphics*

*controller ... '), of which said components/circuitry clearly generates the GUI –*

Art Unit: 2439

*with or without direct control via the main processor) generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process (i.e., 'receiving a password through ... '), insofar as the associated bootable controlling software/operating system is powered up, encompassing the claimed limitations, as broadly interpreted by the examiner.];*

after receiving said password,

comparing said password to

stored information using

*the graphic controller [figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas the portable integrated computer system with associated touch screen, software configurable keyboard, optional memory configurations, installable applications, etc., comprising a microprocessor based controller and associated integrated peripheral logic/circuitry (e.g., video graphic components/circuitry (' ... a graphics controller ... '), of which said components/circuitry clearly generates the GUI – with or without direct control via the main processor) generates the Ultimaco 'SafeGuard Easy' GUI that controls the (pre-boot) user authentication process (i.e., 'receiving ... comparing ... said password ... stored information using ... graphic controller '), insofar as the associated bootable controlling software/operating system is powered up, encompassing the claimed limitations, as broadly interpreted by the examiner.]; and*

Art Unit: 2439

booting the operating system after

comparing said password to

stored information using said graphics controller [*figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas the system Ultimaco 'SafeGuard Easy' controls the user authentication process (i.e., 'booting ... after comparing ... '), insofar as the associated bootable controlling software/operating system is subsequently booted, encompassing the claimed limitations, as broadly interpreted by the examiner.]*”.

Further, as per claim 11, this claim is the embodied method software for the method claim 1 above, and is rejected for the same reasons provided for the claim 1 rejection.

7. Claim 3 ***additionally*** recites the limitation that; “The method of claim 1 including generating said graphical user interface using said graphics controller.”.

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas the system touch screen, associated integrated peripheral logic/circuitry (e.g., video graphic components encompassing the 'graphics controller' as an integrated component (i.e., on the main circuit board)) generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process, insofar as the associated bootable controlling software/operating system is powered up, encompassing the claimed limitations, as broadly interpreted by the examiner.).

Further, as per claim 13, this claim is the embodied method software for the method claim 3 above, and is rejected for the same reasons provided for the claim 3 rejection.

8. Claim 4 *additionally recites* the limitation that; “The method of claim 3 including storing information for  
generating said graphical user interface on  
an option memory.”.

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas the system touch screen, associated integrated peripheral logic/circuitry (e.g., video graphic components encompassing the 'graphics controller' as an integrated component (i.e., on the main circuit board)) generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process, insofar as the integrated associated memory (e.g., system RAM, graphic controller registers and associated memory, etc.) and peripheral memory (e.g., floppy, RAM sticks, memory cards, etc.), encompasses the claimed limitations, as broadly interpreted by the examiner.).

Further, as per claim 14, this claim is the embodied method software for the method claim 4 above, and is rejected for the same reasons provided for the claim 4 rejection.

9. Claim 5 *additionally recites* the limitation that; “The method of claim 3 including using boot code running on a graphics controller to

Art Unit: 2439

generate the graphical user interface.”.

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas the system touch screen, associated integrated peripheral logic/circuitry (e.g., video graphic components encompassing the 'graphics controller' as an integrated component (i.e., on the main circuit board)) generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process, insofar as the video graphic components, main circuit board with associated processor/program memory that controls the video graphic components, encompasses the claimed limitations, as broadly interpreted by the examiner.).

Further, as per claim 15, this claim is the embodied method software for the method claim 5 above, and is rejected for the same reasons provided for the claim 5 rejection.

10. Claim 6 *additionally recites* the limitation that; “The method of claim 3 wherein generating a graphical user interface includes

generating a graphical user interface to

enable the user to input said password.”.

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas the system touch screen, associated integrated peripheral logic/circuitry generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process (' generating a graphical user interface ... user to input a password ...'), encompassing the claimed limitations, as broadly interpreted by the examiner.).



Further, as per claim 16, this claim is the embodied method software for the method claim 6 above, and is rejected for the same reasons provided for the claim 6 rejection.

11. Claim 7 *additionally recites* the limitation that; “The method of claim 6 wherein generating a graphical user interface includes  
generating an on-screen keyboard.”.

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, and more particularly col. 2, lines 15-23, 53-63, whereas the system touch screen, associated integrated peripheral logic/circuitry generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process (' generating a graphical user interface ... generating an on-screen keyboard '), encompassing the claimed limitations, as broadly interpreted by the examiner.).

Further, as per claim 17, this claim is the embodied method software for the method claim 7 above, and is rejected for the same reasons provided for the claim 7 rejection.

12. Claim 8 *additionally recites* the limitation that; “The method of claim 1 including receiving inputs from the user  
through the graphical user interface  
without a keyboard.”.

Art Unit: 2439

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, and more particularly col. 2, lines 15-23, 53-63, whereas the system touch screen, associated integrated peripheral logic/circuitry generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process ('receiving inputs from the user ... without a keyboard'), encompassing the claimed limitations, as broadly interpreted by the examiner.).

Further, as per claim 18, this claim is the embodied method software for the method claim 8 above, and is rejected for the same reasons provided for the claim 8 rejection;

13. Claim 9 *additionally recites* the limitation that; “The method of claim 1 including authenticating a user and allowing the operating system to boot if the user has been authenticated.”.

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, whereas the system Ultimaco 'SafeGuard Easy' controls the user authentication process ('... authenticating a user ...'), insofar as the associated bootable controlling software/operating system is subsequently booted ('... allowing the operating system to boot if ...'), encompassing the claimed limitations, as broadly interpreted by the examiner.).

Art Unit: 2439

Further, as per claim 19, this claim is the embodied method software for the method claim 9 above, and is rejected for the same reasons provided for the claim 9 rejection.

14. Claim 10 *additionally recites* the limitation that; “The method of claim 9 including receiving a password entered  
without a keyboard  
using the graphical user interface.”.

The teachings of Clough et al are directed towards such limitations (i.e., figures 1-5 and accompanying descriptions, col. 1, lines 59-col. 4, line 3, and more particularly col. 2, lines 15-23, 53-63, whereas the system touch screen, associated integrated peripheral logic/circuitry generates the Ultimaco 'SafeGuard Easy' GUI that controls the user authentication process ('receiving a password entered ... without a keyboard ... using the graphical user interface'), encompassing the claimed limitations, as broadly interpreted by the examiner.).

Further, as per claim 20, this claim is the embodied method software for the method claim 10 above, and is rejected for the same reasons provided for the claim 10 rejection.

### ***Response to Amendments***

15. As per applicant's argument concerning the lack of the various teachings by Clough et al and Ultimaco, dealing with the lack of GUI functions prior to operating system boot, the examiner has fully considered in this response to requested continued examination; the arguments, and finds them not to be persuasive.

As per the amending of claims 1 and 11 to encompass the graphics controller functionality relative to the claim limitations dealing with the booting of a/the operating system sequence (see final office action – 24 November 2009, pages 11-12 response to arguments), the amending does not add patentable distinction to the graphics controller/booting limitations. More succinctly, the claim language, as presently amended, does not yet distinguish the assumed claim requirement that the graphics controller is a processing element with associated memory, etc., distinct from the system/device that the graphics controller is a part of. The aspect of the graphics controller being a processor based element per se is such that the graphics controller can therefore 'run [e.g., as per claim 5] ' GUI software using the touch screen and such software code is independent of the memory used for the processor of the system/device (e.g., a processor based host system element) of which the graphics controller is a part of.

Further, as claimed, the operating system claimed is not distinguishable as being part of the graphics controller processor, or the system/device processor.

Thus, the examiner suggests for the sake of moving prosecution forward that the applicant direct the amendment of claim limitations towards qualifying more explicitly the graphics controller functionality such that using a/the graphics controller on-board password entry software to allow for entry of password(s) – and the comparing for authentication purposes – such that upon authentication of a/the user, the graphics controller will be associated with **causing** the operating system to boot from memory resident/associated with the system/device that the graphics controller is a part of. It should be noted that the claim language phrase '**causing** ' in of itself is patently broad, such that the phrase '*generating a signal* ' at the very least, would be a better approach, and the phrasing '*transferring the operating system or boot*

Art Unit: 2439

*associated software* ' or similar, dealing with resulting operating system/boot associated software associated with the graphics controller aspect of the system/device processor/processor memory boot sequence subsequently occurring (e.g., see PTO-892 reference U.S. Patent No. 5,692,199 for analogous/ similar approach).

Art Unit: 2439

***Conclusion***

16. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (571) 272-3861, and whose unofficial Fax number is (571) 273-3861 and unofficial email is Ronald.baum@uspto.gov. The examiner can normally be reached Monday through Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad, can be reached at (571) 272-7884. The Fax number for the organization where this application is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald Baum

Patent Examiner

/R. B./

Examiner, Art Unit 2439

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2439